# BSA's CSO LTCP

## Stakeholder Panel Meeting

## August 7, 2014

Imagine the result

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# Agenda

- Project History
- Recap from Last Meeting
- Timeline Since Last Meeting
- Final Recommended Plan
- Ongoing Projects
- Next Steps
- Public Participation Moving Forward

 

# Project History - Overview

**1994**
- USEPA CSO Control Policy Issued (in part required development of LTCP)

**2004**
- Submitted Initial LTCP to NYSDEC

**2006-2007**
- Received Comments from NYSDEC
- NYSDEC/USEPA Request Additional Evaluations

**2008**
- Additional LTCP Work Starts

Additional Flow/Rainfall Monitoring
Collection System Model Refinement
Water Quality Sampling
Receiving Water Quality Model Development
Revised Financial Capability Analysis

**2009**
- Nego

**March 18, 2014 Regulatory Agencies Approve LTCP**

**April 2012**
- Subr ted by Regulatory Agencies and AO)

**Ongoing**
- Over $60 Million Invested in CSO Controls/Improve

**April 11, 2014 Regulatory Agencies Issue Amended AO**

**January 2014**
- Updated LTCP Report to USEPA/NYSDEC (based o

 

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# Recap from Last Stakeholder Panel Meeting on April 25, 2012

- Administrative Order was Issued March 9, 2012 Requiring LTCP Submittal by April 30, 2012
- AO Stated LTCP Improvements to be Completed by December 31, 2027 (15 year schedule)
- Potential Effect of AO on Recommended Plan and Implementation Schedule
  - Higher financial burden due to shortened schedule
  - Potential reduction in GI control levels
  - Less opportunity to right-size improvements
  - Likely an all gray program

 

# Recap from Last Stakeholder Panel Meeting on April 25, 2012

- Updated Draft LTCP Included Two Implementation Schedules:
  - 15-year Regulatory Agency Required Plan
  - 19-year BSA Recommended Plan
- Updated Draft LTCP Report was about to be Delivered to Regulatory Agencies on April 30, 2012 in Accordance with Administrative Order
- SEQRA Process for LTCP was in Progress
  - BSA Board designated as lead agent
  - BSA opens public comment period
  - Third round of pubic meetings scheduled

 

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# Timeline Since Last Meeting - 2012

- **April 30, 2012** – Submitted Updated LTCP to Regulatory Agencies
- **May 4 - June 4, 2012** - 30-day Public Comment Period
- **May 15 - 17, 2012** – Public Meetings Held to Present Recommended Plan
- **June 18, 2012** – BSA Submitted Letter to Regulatory Agencies on LTCP and SEQRA Update
  - Identified concerns raised during public comment period (Extent of GI)
  - Noted schedule for completing SEQRA process
- **August 3, 2012** - BSA Submitted Letter to Regulatory Agencies on Public Participation Summary and SEQRA
  - Summarized Public Comments (mainly extent of GI implementation)
  - Advised Agencies of Negative Declaration
  - Identified BSA LTCP Approach (percent capture, frequency of activation, meet water body specific WQ Goals)
- **December 6, 2012** – Received Comments on LTCP from Regulatory Agencies
  - Required BSA to update the original NFA and address Plant Bypasses
  - Develop GI Master Plan to provide additional detail on GI components of the Plan
  - Identified frequency of activation as Agency preferred measure of performance
  - Provided 36 other minor comments on the LTCP document

# Timeline Since Last Meeting - 2013

- **February 2013** – Various Meetings and Correspondence with Regulatory Agencies to Discuss December 2012 Agency Comments on LTCP
- **March 1, 2013** – BSA Submitted Letter to Regulatory Agencies Regarding:
  - As agreed upon at a February 12 meeting, provided work plans and schedule for developing and submitting revised No Feasible Alternatives (NFA) analysis and GI Master Plan
  - In lieu of AO required semi-annual report:
    - Status of ongoing projects
    - PCM program update on CSO 060 Green Infrastructure (GI) demonstration project
- **March 21, 2013** – Regulatory Agencies Provided Response Letter to BSA's March 1, 2013 Letter
  - Established August 15, 2013 as delivery date for updated LTCP
  - Set schedule for completion of draft NFA and GI Master Plan (Prior to August 15)
  - Provided comments on Work Plans

# Timeline Since Last Meeting - 2013

- **April 12, 2013** – BSA Submitted Letter to Regulatory Agencies Regarding:
  - Requested clarification on schedule for revising LTCP
  - Response to misc.  comments included in Agencies Dec. 6, 2012 Letter (referred to as Section 4 “Other Comments”)
- **April 24, 2013** – Regulatory Agencies Issued Letter to BSA
  - Established final schedule for NFA, GI Master Plan, and Revised LTCP submissions
    - NFA/GI Master Plan – August 2, 2013
    - Set Agency/BSA meeting on NFA and GI Master Plan  (mid-August 2013)
    - LTCP – 60 days following receipt of written Agency comments
- **June 26, 2013** – BSA Meeting with NYSDEC only to Discuss GI Master Plan
  - Question on property ownership
  - Question on site maintenance
  - Question on PCM

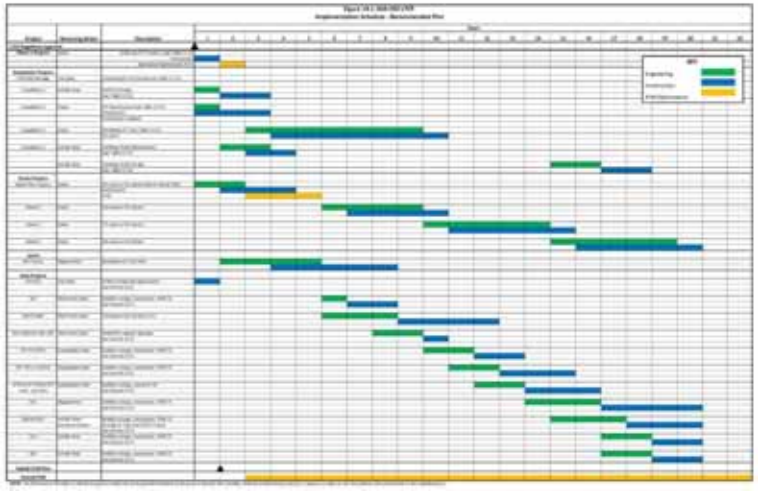
# Timeline Since Last Meeting - 2013

- **August 2, 2013** – BSA Submitted Revised NFA and GI Master Plan to Regulatory Agencies
- **August 20, 2013** – Meeting with Regulatory Agencies to Discuss GI Master Plan
  - Identified use of NYS Stormwater Design manual
  - Clarification on GI modeling techniques
  - Questions on assumed soil characteristics
  - No similar meeting required for NFA
- **October 23, 2013** – USEPA Provided Final Written Comments on LTCP

# Final Agency Comments on LTCP

- Issued Final Approval of NFA
- Issued Final Approval of GI Master Plan
- Suggested 20-year implementation schedule from date of approval of LTCP (represented a significant victory for the BSA)
- Established Submittal Date of January 10, 2014 for BSA's Revised LTCP
- Hinted at enforcement mechanism (AO or Consent Decree)

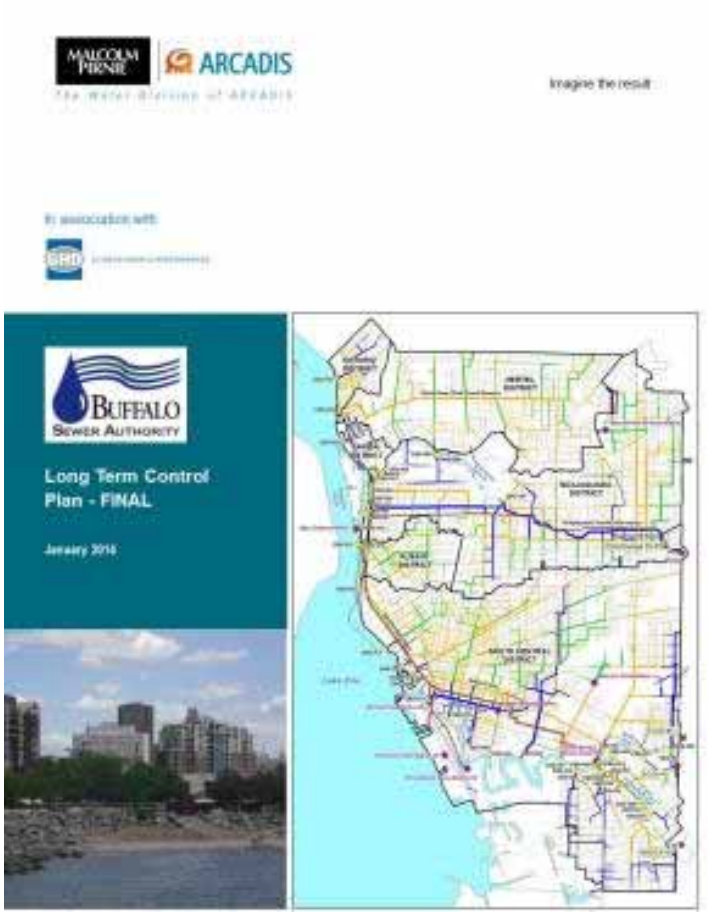


***October 2013 - December 2013*** *– BSA Completes Revisions to LTCP*

# Timeline Since Last Meeting - 2014

- **January 10, 2014** – BSA Submitted Final LTCP to Regulatory Agencies
- **March 18, 2014** – Regulatory Agencies Issued Letter Approving Revised LTCP
- **April 11, 2014** – USEPA Issued Amended Administrative Order (AO) with Approved LTCP Implementation Schedule
  - Set 20-year schedule
  - Established reporting criteria
  - Established procedures for project changes
  - Established penalties
  - Potentially eliminates need for Consent Decree
- **April 30, 2014** – BSA Acknowledges Receipt of Amended AO to Regulatory Agencies



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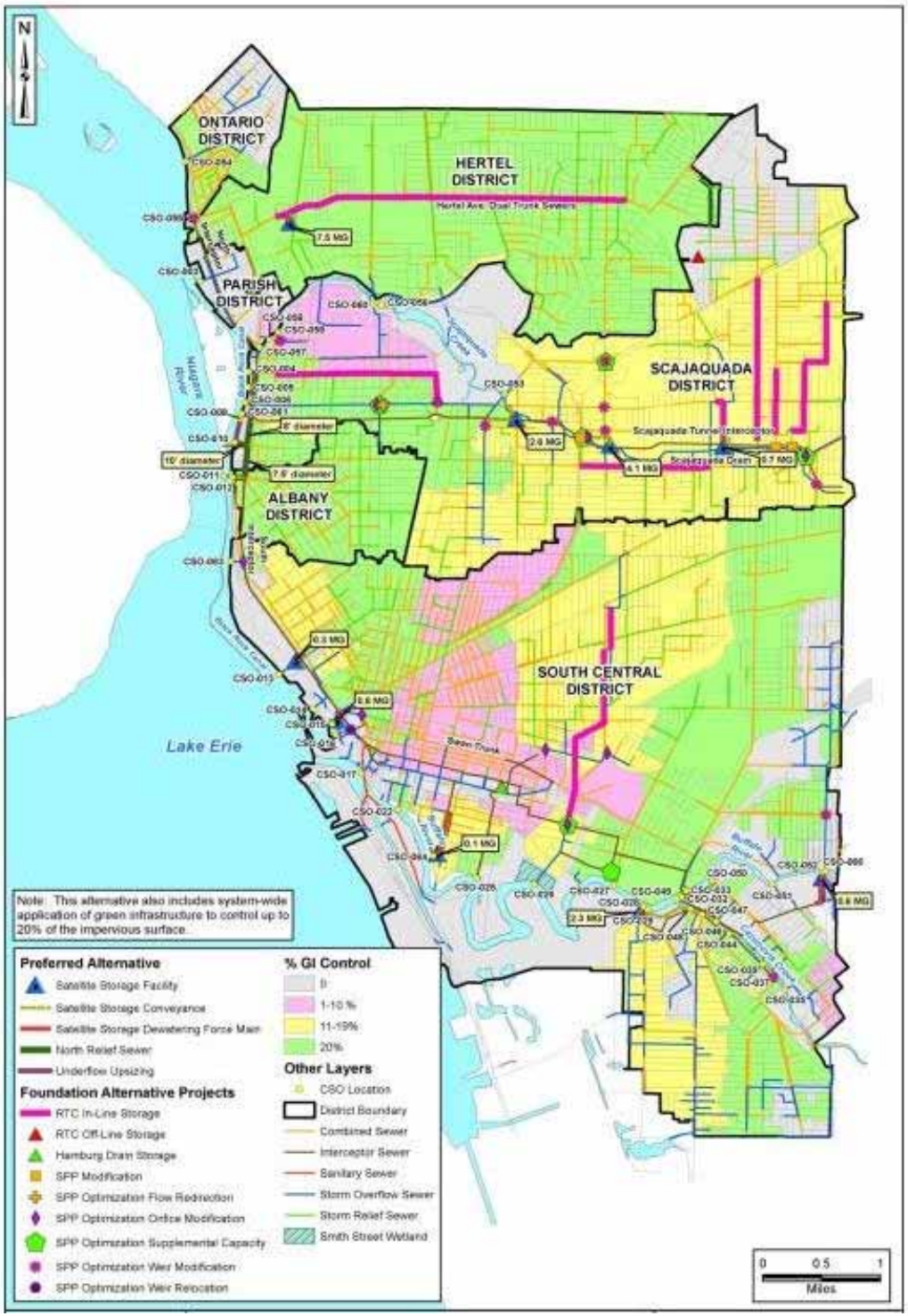
# What's Different in the 2014 Recommended Plan?

- Addition of $41 Million of Improvements at the WWTP from the Revised NFA
  - Upgrades to existing primary clarifiers(160 MGD Capacity)
  - Disinfection of primary effluent
  - Increase secondary system capacity to 400 MGD
- Refined Target Acres of Impervious Surface Control from 1,620 Acres to Range of 1,315-1,620 Acres (GI Master Plan)
  - Acreage refined based on impact of GI at SPP level (focus GI where it will have the most benefit and still meet LTCP goals)
  - Cost held at $92M
- Detailed 20-year Implementation Schedule

***NOTE:*** *Collection System "Gray" Improvement Projects did **not** Change*




# Recommended Plan

- Balance of Gray and Green Technologies
- Refined GI targets
- LOC of 2 to 9 overflows in the typical year
  - Only one Niagara River CSO at 9 OFs/yr
  - Less than 2 OFs/yr in sensitive areas (Erie Basin)
- System-wide Capture of 97.2%

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Table 12-8: Summary of System-Wide Estimated Project Costs

| Receiving Water Body / Project | Project Cost [1,2,3] |
|---|---|
| *Black Rock Canal* | |
| CSO 013 (300,000 gallons) | $3,000,000 |
| North Relief Sewer | $36,000,000 |
| CSO 008/010, 061, 004 Underflow Upsizing | $500,000 |
| *Erie Basin Marina* | |
| CSO 014/015 (800,000 gallons) | $6,700,000 |
| *Cazenovia Creek – C* | |
| CSO 028/044/047 (2,300,000 gallons) | $12,200,000 |
| *Buffalo River* | |
| CSO 052 (600,000 gallons) | $3,900,000 |
| CSO 064 (100,000 gallons) | $2,000,000 |
| *Scajaquada Creek* | |
| Jefferson Avenue & Florida Street (SPP 170B) (2,600,000 gallons) | $9,500,000 |
| SPP 336 a/b (SPP165A, SPP165B, SPP 336A, SPP336B) (4,200,000 gallons) | $11,500,000 |
| SPP 337 (700,000 gallons) | $4,000,000 |
| *Niagara River (Cornelius Creek)* | |
| CSO 055 (7,500,000 gallons) | $18,500,000 |
| *Subtotal* | *$107,800,000* |
| Contingency (20%) | $21,500,000 |
| *Probable Construction Cost* | *$129,300,000* |
| Administrative and Legal (5%) | $6,500,000 |
| Engineering (20%) | $26,000,000 |
| **Total Recommended Plan Cost** | **$161,800,000** |
| *Revised Foundation Plan Cost (for projects not already completed, see Table 11-11)* | *$85,000,000* |
| *Green Infrastructure (system wide)[5]* | *$92,600,000* |
| **Revised Foundation Plan + Recommended Plan** | **$339,400,000** |
| *NFA Alternative C2 at WWTP* | *$41,000,000* |
| ***System-Wide Improvements*** | ***$380,400,000*** |

**NOTES:**
[1] Year 2012 dollars.
[2] All Costs Rounded.
[3] Planning Level Estimate.
[4] Right-of-Way and/or land acquisition not included.
[5] GI cost based on initial target control of 1,620 acres.

# Total System-Wide Estimated Project Cost = $380 Million

**(2012 dollars)**

 

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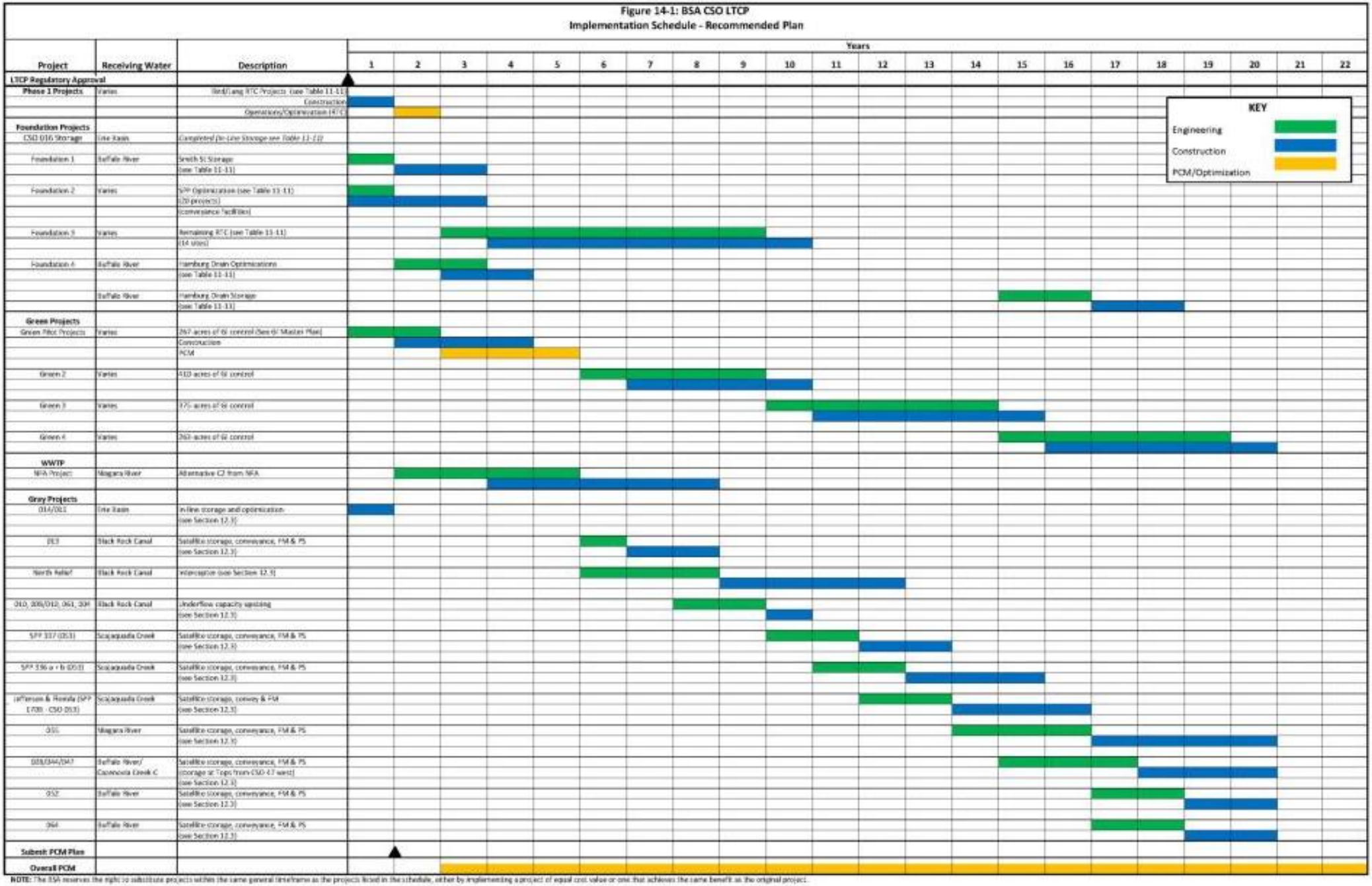
# Implementation Schedule




NOTE: The BSA reserves the right to substitute projects within the same general timeframe as the projects listed in the schedule, either by implementing a project of equal cost value or one that achieves the same benefit as the original project.

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# Benefits of 2014 LTCP to the City of Buffalo

- Blend of Gray and Green Projects (2004 Plan included only Gray Infrastructure)
- Enhanced Public Participation
- SEQRA Negative Declaration (no SEQRA Previously)
- Water Quality Model Based (Limited WQM in 2004)
- Addresses CSOs in Sensitive Areas First
- Regulatory Agency Approval
- Reduction of $180M in cost vs. 2004 Plan
- Public/Environmental Buy-in
- Addresses WWTP Bypasses

 

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# Ongoing Projects

- **Real Time Control Demonstration Projects (Bird and Lang)**
  - Construction started March 17, 2014
  - Anticipated completion September 1, 2014
  - One year post-construction operation optimization

- **Smith Street Storage**
  - Currently under design
  - Changed from off-line storage/wetland to in-line storage/RTC

- **SPP Optimizations**
  - 20 different projects (Weir adjustments, orifice plate removal, underflow sewer upsizing)
  - Ongoing design and construction

 

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# Ongoing Projects (cont.)

- **Erie Basin In-line Storage and Optimization**
  - Construction started in August 2013 and completed by February 2014
  - Project cost $1.2 million
  - 50,000 gallon storage system

- **Hamburg Drain Optimizations / Storage**
  - Currently under preliminary design
  - Changing from a large centralized off-line storage facility
  - Evaluating several smaller in-line storage, off-line storage, RTC, and sewer separation options
  - Level of control will be localized at the SPP

# Green Infrastructure Pilot Projects

- Target control of 267 acres of impervious area
- Vacant property demolitions
  - Pilot alternative demolition techniques
- Green Streets Projects
  - Carlton Street (porous asphalt streets)
  - Fillmore Street (porous asphalt parking lots, vacant lot improvements, redirect stormwater)
  - Ohio Street (porous asphalt shared use path and parking lanes, tree plantings, runoff reduction)

 

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# Next Steps

- Develop Post Construction Monitoring Plan for Submittal to Agencies by March 18, 2015
- Prepare/Submit Semi-Annual Status Reports (September 1st and March 1st)
- Conduct Semi-Annual Status Meetings (September/October and March/April)
- Move Forward with Projects Scheduled for Years 1-5 of Implementation Schedule

 

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# Public Participation Moving Forward

- Continue Public Involvement through Stakeholder Panel Meetings
- Define Role of Stakeholder Panel
- Routine Updates to CSO LTCP Project Website (http://bsacsoimprovements.org/)
- Press Releases for Specific Projects
- Project Specific SEQRA Review
- Other Suggestions?

 

# Comments / Questions?